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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/991,596	11/21/2001	Nagendra Nagarajayya	SUN-P6305	7581

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EXAMINER

TRUONG, LECHI

ART UNIT	PAPER NUMBER
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2194

MAIL DATE	DELIVERY MODE
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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/991,596	Applicant(s) NAGARAJAYYA ET AL.	
	Examiner LECHI TRUONG	Art Unit 2194	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-21 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims **1-21** are rejected under 35 U.S.C. 103(a) as being unpatentable over Dukack et al (US. Patent 6,609,159 b1) in view of Woodring et al (US. Patent 6,519,686 B2) and further in view of Jason Lango (An Implementation of the Solaris Doors API for Linux).

3. **As to claim 1**, Dukack teaches the invention substantially as claimed including: data (information, col 3, ln 35-42), data between processes in a computer-based system (col 6, ln 35-40/ col 8, ln 37-42), one or more symbols (OS function 144, col 8, ln 55-62), the first library (the library of the OS 134, col 8, ln 52-55), process calling for one or more symbols in a first library (col 8, ln 58-62), associating each process with a second library (col 8, ln 36-37), a second library (the interposed library , col 8, ln 36-37/ ln 60-65), one or more symbols of the second library(the interposed library function, col 8, ln 52-65), a door interprocess communication (file descriptor , col 3, ln 62-64/ col 10, ln 33-34/ ln 53-55/ calls the OS call read() function with

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that file descriptor, col 10, ln 30-35), said door interprocess mechanism enabling each process to communication(col 15, ln 1-6/ col 16, ln 15-21), interprocess communication mechanism(interprocess communication links, col 8, ln 40-46), intercepting a call from each process for a symbol in said first library(col 8, ln 58-65/ col 9, ln 24-30), redirecting said call to a corresponding symbol in said second library(col 8, ln 63-65).

4. Dukack does not explicitly teach a synchronization signal, a mapped memory. However, Woodring teaches a synchronization signal, a mapped memory, semaphore (the synchronization, management, and processing of the information stream, col 6, ln 20-22/ memory mapped file, col 7, ln 30-31/ map the buffer pointer to the buffer into their address space, col 7, ln 13-16/ semaphore (FBSEM) mechanism 316, col 6, ln 24-28).

5. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Dukack and Woodring because Woodring's a synchronization signal, a mapped memory, and semaphore would improve the efficiency of Dukack's system by providing an efficient information streaming of multimedia information in a multi-process software environment.

Dukack and Woodring do not explicitly teach door is a file descriptor/ calls the OS read () function with that file descriptor. However, Jason teaches door is a file descriptor (Door are made visible to the application programmer as standard Unix file descriptor (or " door descriptor, sec: 4, ln 8-10/ the door is represented in the kernel code as a door structure, sec: 6.1, ln 3-6/ a door library call refer to a particular door via a door descriptor, the door kernel code will look in the current process's file descriptor table, sec: 6.1, ln 13-16).

6. It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the teaching of Dukack, Woodring with Jason to incorporate the feature of door is a file descriptor because this affects a big performance improvement over the pipe implementation.

7. **As to claim 2**, Dukack teaches one or more symbols associated with a socket interprocess communication mechanism (col 9, ln 24-30).

8. **As to claim 3**, Dukack teaches dynamically linking each process with said second library (col 8, ln 52-54).

9. **As to claim 4**, Dukack teaches second library comprises one or more server side symbols and one or more client side symbols (col 8, ln 55-58).

10. **As to claim 5**, Dukack teaches server side symbols further comprise: a bind symbol, an accept symbol, a write symbol, and a close symbol (col 8, ln 55-58/FIG. 10).

11. **As to claim 6**, Dukack teaches client-side symbols further comprise: a connect symbol, a read symbol, a write symbol, a close symbol, and a thread-create symbol (col 8, ln 60-65/ col 24, ln 12-25/ Fig. 10).

12. **As to claims 7-12**, they are apparatus claims of claims 1-6; therefore, they are rejected for the same reasons as claims 1-6 above.

13. **As to claim 13**, it is an apparatus claim of claim 1; therefore, it is rejected for the same reason as claim 1 above. In additional, Dukack teaches a plurality of processes (communication loads between multiple back end and server processes, col 3, ln 50-53), an interposer (col 3, ln 42-46).

14. As to claims 14, 15, they are apparatus claims of claims 2, 3; therefore, they are rejected for the same reasons as claims 2, 3 above.

15. As to claim 16, Woodring teaches the synchronization signal (col 6, ln 20-22).

16. As to claim 17, Woodring teaches a mapping memory (col 7, ln 29-32).

17. As to claims 18-21, they are apparatus claims of claims 1, 4-6; therefore, they are rejected for the same reasons as claims 1, 4-6 above.

Response to the argument:

17. Applicant amendment filed on 1/18/2008 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) “ Dukach et al . effectively teaches away from using soloris Door as an IPC mechanism ”.

18. Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Dukach teaches the font end accepts a connection from a client and communication a file descriptor representing the client connection to the library returns the file descriptor to the back ent in standard format as if the connection had been accepted directly by the OS(col 3, ln 60-65)/ when the libray intercepts a call from the back ent server using the alias file descriptor it programming which determine if the call should be communicated to the front end network listen socket will know the alias file descriptor is associated with network service listen socket (col 25, ln 32-36). Specification page 17 mentioned the door is a file descriptor(ln

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14-16/ page 25, ln 21-26) and Jason teaches door is a file descriptor (Door are made visible to the application programmer as standard Unix file descriptor (or “ door descriptor, sec: 4, ln 8-10/ the door is represented in the kernel code as a door structure, sec: 6.1, ln 3-6/ a door library call refer to a particular door via a door descriptor, the door kernel code will look in the current process’s file descriptor table, sec: 6.1, ln 13-16).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272-3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Meng-Ai An can be reached on (571) 272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIP. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIP system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195